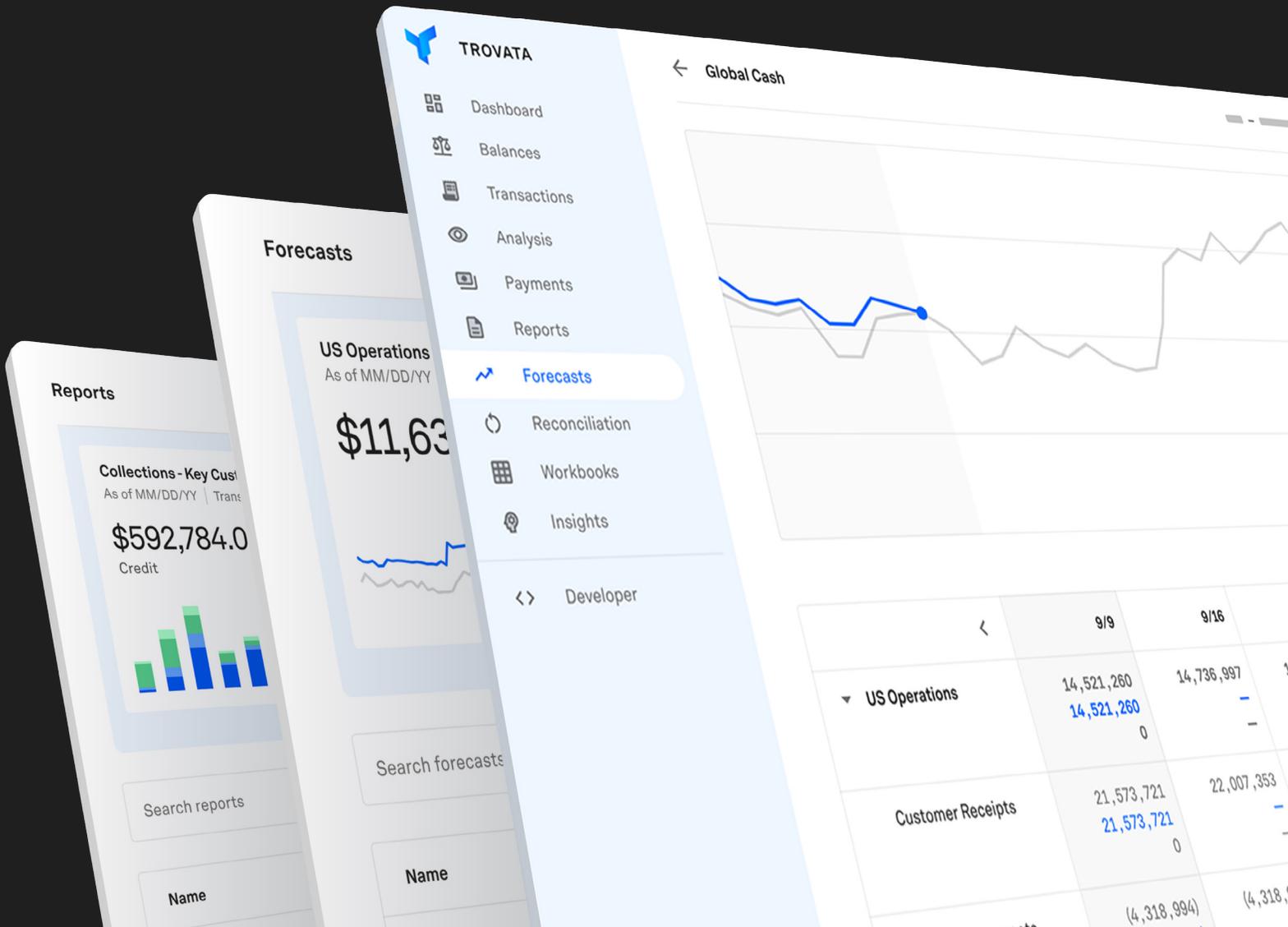




TROVATA

GUIDE

# THE ESSENTIAL Startup Cash Forecasting and Reporting Guide



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# Introduction

As a startup founder or CFO in today's economy, you're undoubtedly facing increased pressure to optimize costs while achieving real, sustainable growth. When it comes to your treasury and finance operations, it's critical to know your cash position today and forecast tomorrow's as accurately as possible. That way, you can know how much financial runway you have.

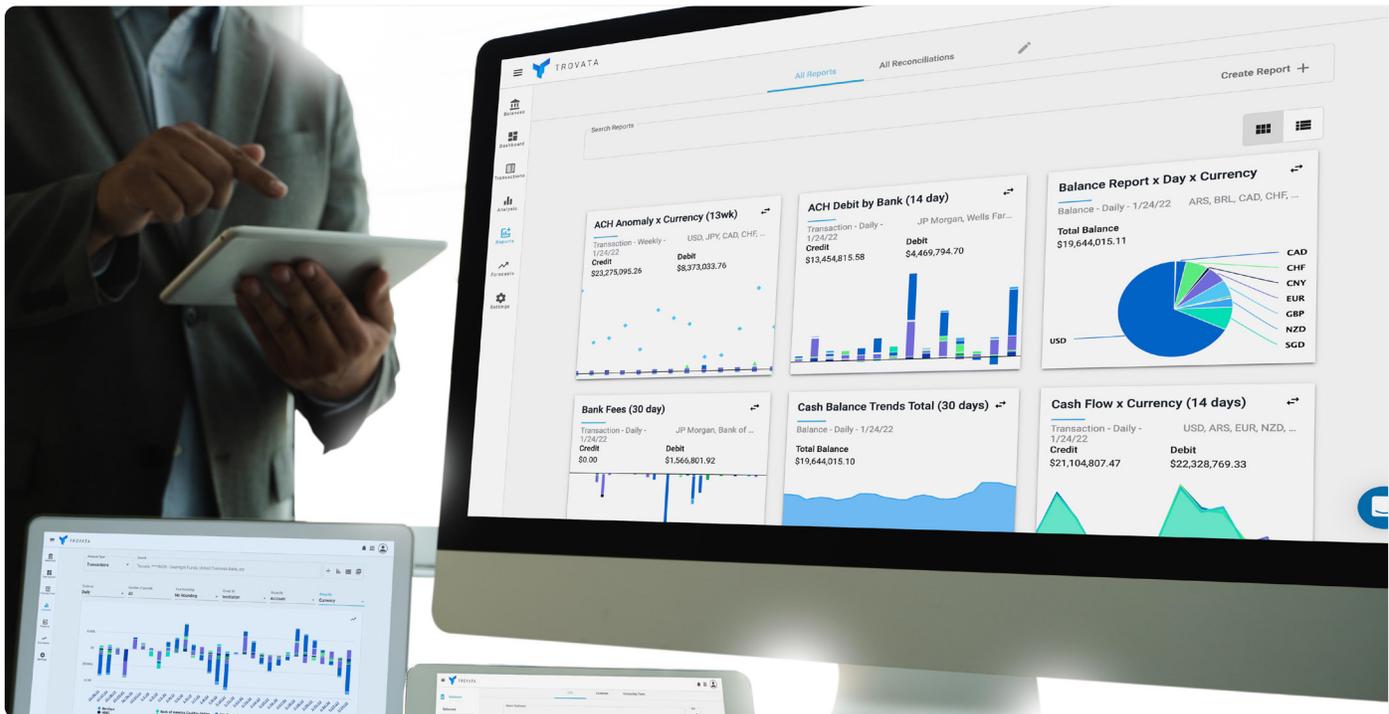
By and large, businesses are cutting back on spending. As this trend continues, it's important to be able to generate cash reports quickly and unlock deep insights into your startup's cash flows. This way, you can **extend your financial roadway and reduce cash burn** as much as possible. Furthermore, having a clear line of sight over your business will enable you to quickly answer stakeholder questions and thoughtfully consider aspects like when to raise your next round of funding and how much.

However, if you're still using spreadsheets to manage cash, the hours of manual work required just to maintain them are holding you back from tapping into these insights. The startups that can analyze, report on, and forecast cash more quickly and accurately will be the ones to outlast their competitors and successfully ride out the storm. That's because, among other advantages, they can better find growth opportunities hidden in their bank data and enjoy a lower cost of capital.

This is what we want for you and your business!

## In this guide, we will explain:

- **What is cash burn** and how to manage it to extend your financial runway
- **Reporting and forecasting best practices** to better monitor your startup's health.
- **How to increase efficiency** while ditching the spreadsheets (and no, we won't suggest you implement a costly Treasury Management System).
- **How you can take full control of your own multi-bank data** leveraging APIs and machine learning technology for faster, more accurate reporting and forecasting.



# What is Cash Burn?

If you're experiencing cash burn, it means your business is spending money faster than it's earning it. Cash burn is a key KPI closely related to another important metric, cash flow. Specifically, **cash burn is a measurement of negative cash flow** (net decrease in cash over time).

Especially for startups, cash burn is like walking a tightrope – you want to spend enough money to keep your business growing or hit that next milestone, but not so much money that expenditures consistently outweigh revenue.

If it does, you'll have a cash out date – a day on which the company completely runs out of cash.

Of course, you'll only run out of money if you don't make the necessary adjustments. These could involve cutting costs, increasing income, or raising additional capital. Cash burn rate is the speed at which your cash reserves are dwindling. This is usually calculated per month.

Your cash runway is the amount of time you have before you run out of money. Obviously, the longer, the better, as you'll have more time to focus on executing business initiatives and more options to tweak your company's cash situation along the way.



# Gross Burn Rate vs. Net Burn Rate

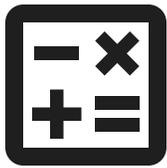
**Gross burn rate** shows how much money your company is spending, without considering how much it's earning.

The gross burn rate can be useful in showing the company's overall cash position. It helps give a clear picture by eliminating bias caused by particularly profitable periods. For example, if your business is seasonal, gross burn rate is going to be more useful for you than it would be for companies making similar profits year-round.

In contrast to gross burn rate, **net burn rate** does take your company's earnings into account. It shows if you're losing money even when your monthly inflows from revenue-generating activities is added.

Most of the time, when people talk about burn rate, they mean net burn rate.

You'll always have a gross burn rate – every business spends money – but only have a net burn rate when you have a negative cash flow. So, when we're looking at how long a cash runway is, it's the net burn rate we're interested in.



# How to Calculate Net Cash Burn Rate

**Net cash burn rate = Beginning cash balance – Ending cash balance / Number of months**

First, decide how long a period you want to evaluate.

Though cash burn shows the amount lost per month, you'll want to choose a period longer than one month – one very good month or one very bad month could be misleading. Let's say you choose a 4-month period. Using your cash flow statement, find your balance at the beginning of those 4 months and your balance at the end of those 4 months.

Maybe it's \$200,000 in January, and \$130,000 in April.

We subtract the ending amount from the starting amount:

$$\mathbf{\$200,000 - \$130,000 = \$70,000}$$

To figure out how much you're losing per month, simply divide \$70,000 by the number of months in the period.

$$\mathbf{\$70,000/4 = \$17,500}$$

So, your net burn rate is \$17,500 per month.

Using this number, we can figure out the length of your cash runway. Divide the funds you have right now – in this example, \$130,000 at the beginning of April – by your net burn rate:

$$\text{\$130,000} / \text{\$17,500} = 7.42$$

This tells us that – if revenue and expenses remain the same – your company will run out of money in about seven and a half months.

## What's a Good Cash Burn Rate?

Ideally, you'd have no net burn rate and a positive cash flow. However, sometimes it's necessary to dip a bit into the red to grow your business. Six months to a year is a good range to aim for, leaning towards a year.

Remember that, similar to cash flow, cash burn is a running, point-in-time metric.

If you perform a cash burn calculation and see that your reserves will run out in 7 and a half months, keep in mind this figure is based on current spending and income levels. If you have reasonable expectations that revenue will be higher in 2 months, for instance, you don't have to take the cash burn rate at face value.

But if revenue levels are expected to stay the same, or even dip, then you may want to start cutting costs. So, let's say your burn rate is much higher than you're comfortable with. Perhaps you're projected to run out of funds in 5 months.

What steps can you take to get it under control?

## 5 Ways to to Reduce Your Cash Burn Rate

### 1. Cut Costs

Take a hard look at your budget – you'll probably find at least a few unnecessary or redundant expenses among your recent credit card statements. If they don't already, consider having employees work from home at least part time and lease a smaller office space.

### 2. Reassess Your Strategy

Rethink your product mix, go-to market strategy, operations, etc to find opportunities to be more cost effective. It might be time to sunset products that are costly to produce or sell.

### 3. Rethink Your Loans

When it comes to loans, there are three things you can do:

Make the switch to interest-only loans.  
See if you can refinance your loans with more favorable conditions.  
Delay payment as long as you can without incurring fees.

### 4. Increase Revenue

Revisit your pricing. Try making small price increases to your products – every bit helps. Review your products and service obligations and ensure pricing is aligned with the value that new customers are willing to pay for.

Furthermore, if you want to reduce cash burn, don't take risks with unproven marketing strategies that require a big investment upfront.

### 5. Collect Payments

Accounts receivable are great and all, but if payments take too long they're not going to help your cash situation now.

To increase the rate at which you get paid, be sure to send invoices right away. Consider providing incentives for those who pay early, perhaps a discount or an additional product you've had trouble selling.

Now that we've covered cash burn, let's dive into cash forecasting - key to understanding your projected cash inflows and outflows!

# Why Forecast?

First of all, if you're not convinced that your startup needs to create cash forecasts, hear us out.

As mentioned, it's crucial for your startup's health because it helps you anticipate your future cash position and avoid burning too much cash. While that sounds simple, running out of cash is one of the reasons why [82%](#) of small businesses fail.

This means they either overestimated sales or underestimated expenses, or were not financially prepared for a crisis. So, it's safe to bet that either they did not regularly create cash flow forecasts, or if they did, they weren't very accurate.

A good practice is to start by creating a 13-week cash forecast. **This report will help ensure that you have enough cash on hand to cover your operational expenses and to help you prepare for any unexpected scenarios that may come your way.** You can also use forecasting to know when to invest your extra cash and unlock additional earnings.



# Managing a 13-Week Cash Forecast Helps:

## 1. Ensure Your Startup Is Adequately Capitalized

Knowing how much cash you have in the bank helps you be proactive with securing the right type of financing options to meet your business's cash flow needs.

## 2. Identify and Plan for Cash Shortages

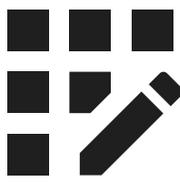
Seasonality is something every business faces to varying degrees. Understanding your business's seasonality alongside your typical level of cash reserves ensures that you can meet your working capital needs throughout the year.

## 3. Properly Allocate Cash Surplus

Understanding when your organization may have a cash surplus through forecasting helps you make the best investment decisions possible and provides an opportunity to let your capital grow on its own, thus doing the work for you.

## 4. Plan for Different Scenarios

Geopolitical threats, navigating a changing economy, emerging growth opportunities, and the consideration of entering new market segments all bring unexpected changes in cash flow. Utilizing scenario planning within your cash forecasts can help your organization identify potential unforeseen circumstances into cash management plans that can be implemented quickly as these situations may arise.

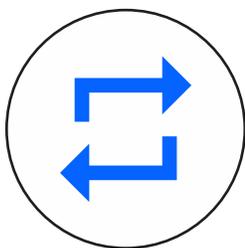


# How to Establish a 13-Week Cash Forecast

## Determine Your Forecast's Objectives

The purpose of a 13-week cash forecast is to help you better understand what cash your startup will have during a certain period. However, your requirements are going to depend on your company's size, strategic objectives, and whether it's cash rich or cash poor.

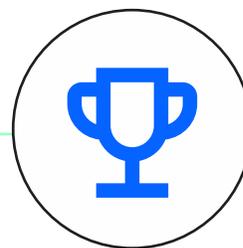
Having a deeper understanding of your organization's strategic objectives is going to help you paint a picture of what your forecast requirements should be. When determining your forecast objectives, you should consider the following aspects:



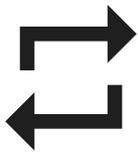
**Frequency**



**Level of Accuracy**



**Purpose**



# Frequency

Your forecast's frequency can depend on a number of factors:

## Is your startup cash rich or cash poor?

If you don't have a large cash reserve, you may consider forecasting weekly, if not even daily. But if you're currently cash rich, you may just have to forecast monthly to ensure that you are reaching your quarterly cash objectives.

## Do you have a big planning date coming up?

Perhaps you're considering acquiring a company, taking on long-term debt, or just having a larger, untypical cash outflow going out on a particular day. Even if your startup is cash rich, you may want to consider increasing your forecast's frequency to ensure you have enough cash in the right accounts to cover outflows.



# Level of Accuracy

Most of us can agree that we would desire our cash forecast to be as accurate as possible, but gaining up to 99% accuracy could increase the time spent compiling and analyzing data that you just can't afford to take away from other strategic objectives. As a rule of thumb, shoot to be more accurate when cash reserves are low in order to make sure you can cover your base expenses.

# Purpose

The purpose of a direct cash forecast is to understand how much cash you have and where it is located at various points in time. Going further, your organization may have some short-term strategic objectives that it's looking to accomplish. In that case, you're going to need to know exactly where your cash is.

**Questions you may ask yourself include, are you:**

- **Focused on accelerating your collections?**
- **Trying to forecast your necessary short-term cash to have more borrowing options with the bank?**
- **Expecting a large cash expenditure that isn't typical, like making an acquisition or purchasing upfront equipment?**
- **Trying to gain a better understanding of where your cash reserves need to be at quarter-end?**

The answers to these questions will not only inform the frequency or accuracy your forecast requires, but may also influence your cash management strategy. No one understands your business more than you do. Make sure all of your key stakeholders are in agreement on the purpose of your direct cash forecast. That way, you and your organization can make more informed, data-driven decisions.

# Break Your Cash Flow Down Into Inflows and Outflows

Developing a [13-week cash flow forecast](#) can look simple on paper, but it can grow to become more complicated as your business grows. For start-ups, it may be easier as it is simpler to wrap your arms around all the functions of the business. As your business expands, it may have more key stakeholders and divisions to consider, ensuring that a degree of automation is needed to maintain an accurate forecast.

First, it is important to understand potential sources of cash and outflows. In direct cash forecasting, cash is recognized when cash enters and leaves your bank accounts. This means that your cash inflow and outflow categories are going to be based on the methods your cash travels in and out of the bank.



## Sources of Cash

- **Lockbox/Deposits:** Deposits from checks or cash gained from sales
- **Wire transfers:** Wire transfers from sources outside the organization
- **ACH:** Deposits as a result of batch payments from clients
- **Borrowing:** Any cash gained from short-term loans
- **FX:** Cash obtained from differences in exchange rates

## Cash Outflows

- **Payroll:** Outflows as a result of paying employees
- **Account Payables:** Outflows from paying vendors
- **Wires:** Outflows via wire transfers to other bank partners or vendors
- **Debt Payment & Debt Maturity:** Outflows as a result of paying off debt
- **FX:** Outflows as a result of losing cash due to a lower exchange rate

These lists are not exhaustive of the types of inflows and outflows you may have within your business, but it is a great starting point to start thinking about your unique sources of cash and expenditures.

# Different Methods for Forecasting Cash Flow

When forecasting your cash flow for any given period, there are a variety of statistical methods that can be utilized. The most common are Naïve, simple moving average, and exponential moving average.

## Naïve Forecasting

The Naïve approach is the most cost-effective forecasting model as it is produced based on historical bank data. From this bank data, you can make assumptions that cash flow will be similar to previous periods, especially if your startup has recurring revenue.

Machine learning technology can be utilized to increase the accuracy of this model as it can analyze and find trends within your bank data. The weakness of this modeling method is that it assumes that business will remain steady overtime, and doesn't consider seasonality of your business.

## Simple Moving Average Forecasting

Simple moving average forecasting (SMA) is useful to discover trends in your cash flow as it adds your closing cash balances over time and divides that sum by the number of periods. This can be useful to discover whether your cash flow is following either an upward or downward trend over a 30 or 90 day period.

While a simple moving average smooths out the volatility of cash movement over time, it assigns equal weight to all cash positions. If your most recent data have much more of an impact on cash flow, it would not be reflected in this forecasting model.

## Exponential Moving Average Forecasting

Many businesses prefer crafting an exponential moving average forecast (EMA) because EMA gives a higher weight to recent cash positions compared to SMA, which assigns an equal weight to all cash positions over a given time period. If your recent cash movement activity have more of an effect on your cash flow, you may want to consider crafting an exponential moving average forecast.

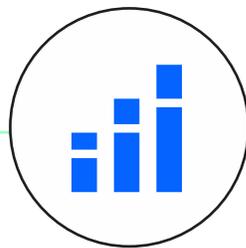


# Keep Track of Your Actuals vs. Your Forecast

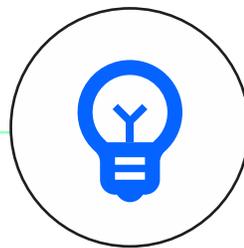
One of the most critical aspects of cash forecasting is gauging the accuracy of your forecasts over time. Without comparing your ongoing forecasts to your baseline, produced at the beginning of the quarter, it's difficult to understand if you are utilizing your organization's cash efficiently. By keeping track of your actuals versus your forecast, you can benchmark your performance over the quarter.



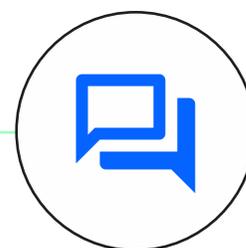
**Establish**



**Perform**



**Craft**

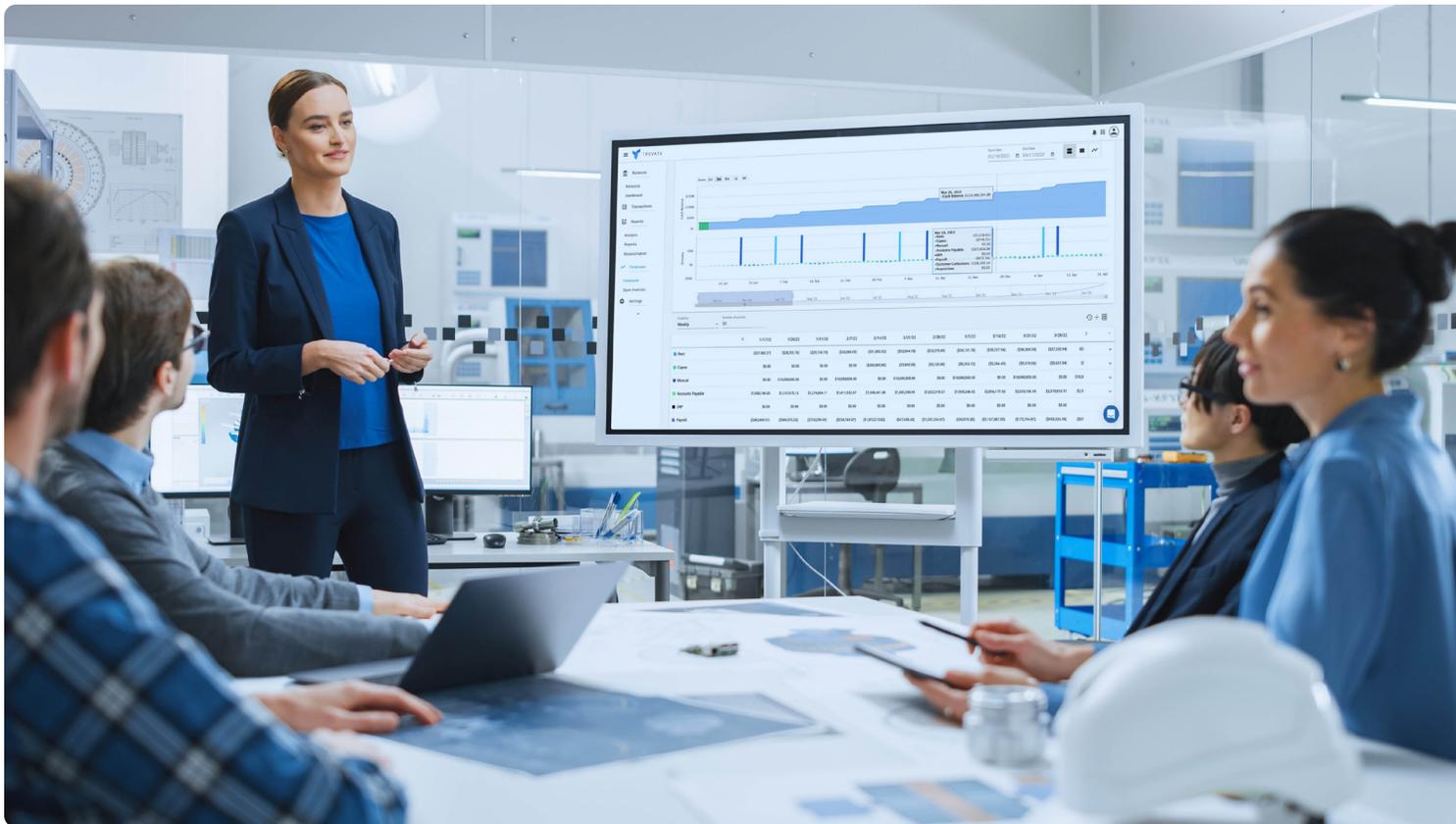


**Communicate**



# Establish a Baseline Forecast

Many companies update their baseline forecast every day with actuals, but the problem with this is that you have no data to compare your actuals to. Make sure to save your first initial 13-week forecast at the beginning of the quarter and keep it in a safe place, so you can continue to perform variance analysis to gauge your forecast's accuracy overtime.



## Perform Variance Analysis

For every week of your forecast, it is critical to understand the difference between your actuals vs. your forecast for each inflow and outflow. By performing this analysis, you can start to piece together what factors affected your actuals and adjust your forecast accordingly.

## Craft the Story Behind Your Forecast

The numbers are only one part of your cash forecast. Link your financial results to your business outcomes to paint a picture regarding the health of your startup.

## Communicate the ‘Why’

Every department at your startup has an effect on your cash inflows and outflows. By establishing visual, succinct methods of communication to key stakeholders, you can ensure you’re making the most informed, strategic decisions.



## 2. Understand Operational Changes That Could Impact Your Cash Flow Model

The market is always changing, so businesses often have to change their strategy and processes to take these changes into account. Historical data only provides you so much detail. There's always oneoff events that could occur throughout quarters such as acquisitions, share repurchasing, or other events that can cause large fluctuations to cash outflows.

## 3. Plan for Multiple Scenarios

With how quickly our digital world evolves and the economy changes, new opportunities and threats can arise quickly. The goal of your cash forecast is to identify these opportunities and threats as early as possible and establish cash management strategies to take advantage of those market changes. Through forecast automation with an automated cash management platform, scenario planning becomes even easier as your organization is able to generate new cash flow forecasts for different investment decisions and sales fluctuations in seconds.

# Direct vs. Indirect Cash Forecasting

While treasurers are focused on knowing when cash is flowing in and out of bank accounts, it is valuable for them to compare their direct cash forecast with the indirect cash forecast. Within the indirect cash forecast, revenue is recognized when it is earned, compared to direct cash forecasts that recognizes revenue when cash is received.

The indirect cash forecast is useful for treasurers when you need to:

**1. Gain better visibility into your AR and AP**

**2. Understand your organization's Days Sales Out Standing (DSO) and Days Payable Outstanding (DPO)**

# Levers You Can Pull In Response to Your Startup's Cash Forecast

## Accelerate Collection of Accounts Receivable

It is important to be aware of your organization's Days Sales Outstanding. DSO for short, measures the time between the closing of a sale compared to receiving the cash from the sale. If you need to increase your cash reserves for large outflow events, you could reach out to your clients who are reliable in paying their bills on time and incentivize them to pay in advance by providing them a discount.

## Schedule Out Your Accounts Payable in Response to Your Required Cash Levels

If your startup isn't actively forecasting cash required for operational expenses, you may find yourself either paying your AP too early or too late when that money could have been utilized in different areas of the business. It's critical that you have visibility into your Days Payables Outstanding, or DPO, as you certainly do not want to be paying your bills quicker than clients are paying you—unless you are receiving a discount for doing so.

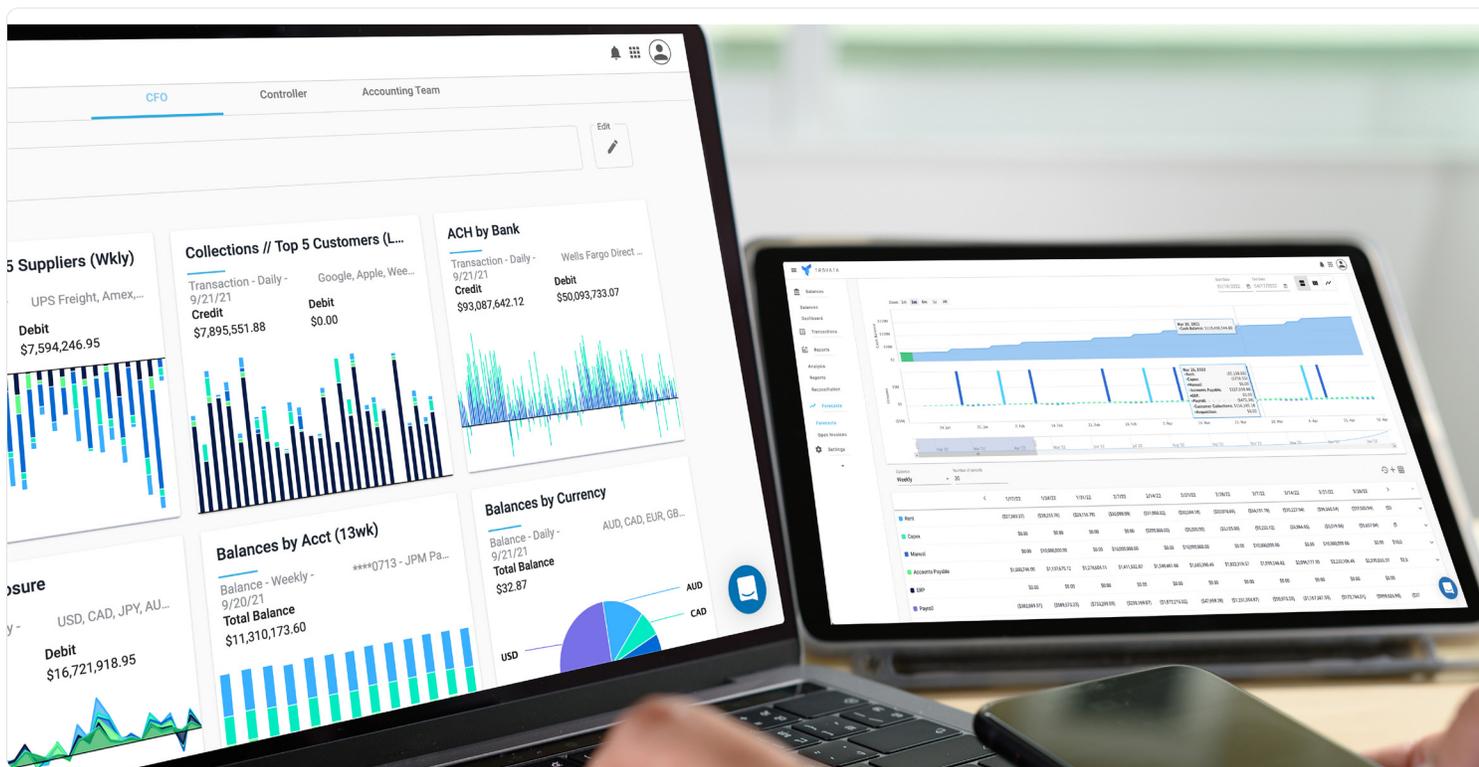
## Follow These Accounts Payable Best Practices:

### 1. Track the efficiency of your DPO

Some organizations have different collection and policies for billing terms. Some common billing terms are net 30, 60 and 90 days. Many companies may provide a discount for paying your bills within 30 days to increase their DSO, but some may not enforce fees for paying after 60 or 90 days. Having a deep understanding of your vendors' billing practices will empower you to schedule out the optimal time to pay outstanding invoices.

### 2. Enter your invoices into your ERP as you receive them

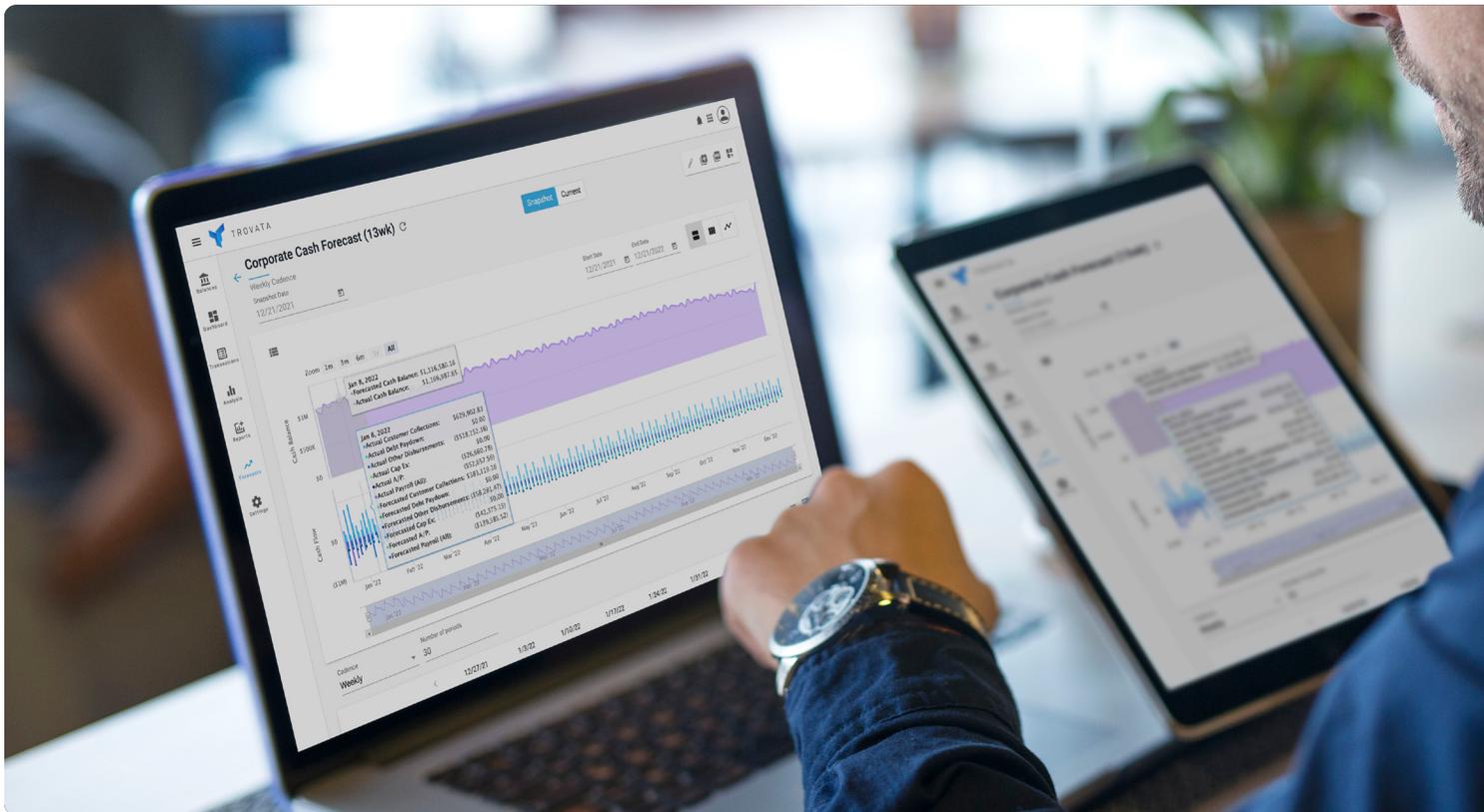
If your finance team is entering invoices into your ERP right as they are due, you won't have enough time to forecast and respond to receivables or payments. By actively entering invoices as they are received, you can ensure that your organization has complete visibility into what payments and receivables are coming down the pipeline and adjust your cash management strategy accordingly.



## Better Optimize Short-Term Debt

Knowing the cash you may need on hand at any given time can assist you within negotiations when borrowing from the bank. To receive term-loans, typically given out as a 30-day, 60-day, or 90-day loan, organizations have to give the bank at least three days' notice. If you don't have clear visibility into the cash you need to run your organization's operations, you may have to resort to prime-day loans. These loans can be received on the same day you ask, but have higher interest rates, leading to you paying more in the long run. Having an accurate forecast on hand ensures that you are borrowing efficiently and getting the lowest possible interest rate possible.

# Measure the Accuracy of Your Cash Forecast with Variance Reporting



Now that you know what you can do in response to your forecast, let's talk about measuring the effectiveness of your forecast.

You cannot know the effectiveness of your forecast without comparing your active forecast with your baseline forecast that you saved at the beginning of the quarter. This is where variance reporting comes in handy.

## Variance Reporting Is Useful In Several Ways:

### 1. Highlights How Accurate Your Assumptions Are

By comparing your cash actuals in week two, for example, compared to what you planned for in your baseline forecast, you can calculate a percentage on the difference between them. Perhaps, by week 8 out, you find that, on average, your forecast is 80% accurate. Through understanding the accuracy, you can dig further into your cash flow to discover inflows and outflows you didn't take into account.

### 2. Provides Insight Into What Actions Created Positive Outcomes and How to Replicate Them in The Future

By helping you identify the differences between your baseline and actual forecast, you can begin to piece together how to increase the accuracy of your forecast and replicate future actions that have a net positive on cash flow.

### 3. Builds Proactivity Into Your Organization's Processes

Performing variance reporting helps build a culture around making more data-driven decisions. By making variance reporting a part of your weekly operations, you can continually build analysis into your cash management processes and begin to form a feedback channel between your treasury team and leadership.

# Other Reports to Effectively Monitor Cash Flow

While the 13-week cash forecast is the most critical report your treasury should take care into crafting and monitoring, there's a number of other reports that can help you measure the efficiency and effectiveness of your organization's cash management processes, such as:



**Total Closing Average Cash**



**Share of Wallet**



**Bank Accounts Per Treasury Employee**



## Total Closing Average Cash

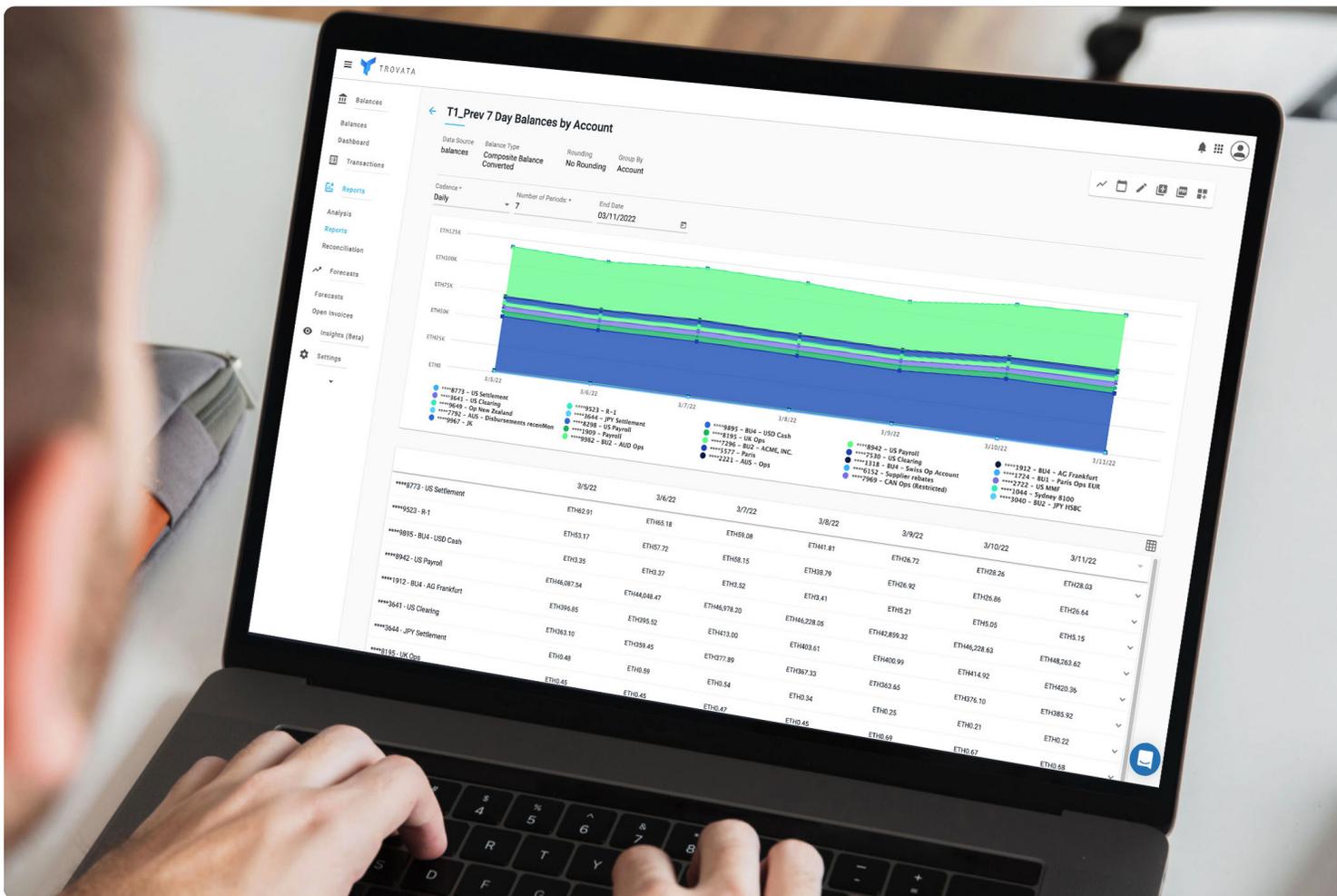
Monitoring your total closing average cash across your global bank accounts is critical as it provides a detailed look into whether your organization is utilizing its cash effectively. For example, if interest rates are high, it's better to maximize your organization's use of cash to pay off debt or put it in solid investments.

Your total closing average cash report may also be broken down into several categories to understand where most of your highest and lowest closing balances lay. You may want to break down your total closing average cash by:

- **Entity**
- **Currency**

## Share of Wallet

Share of wallet refers to the percentage breakdown of your total cash by bank account. Having this percentage breakdown can help you gain a better understanding on where most of your cash reserves are stored, where you can reallocate cash if you have a larger outflow event coming up, and help balance your share of wallet so you can optimize the benefits and services you have access to with each institution..





## Number of Bank Accounts Per Treasury Employee

If you have a treasury department, breaking down your total bank accounts per treasury employee can empower you to better manage your startup's bank accounts and the cash flow going in and out of them. If you have a small number of treasury employees managing over 10 bank accounts each, you could be stretching your treasury thin and they may not have enough time to optimize your treasury processes. On the flip side of the coin, you may find yourself in a situation where you have multiple treasury employees responsible managing the same bank account, which can lead to an potential increase in human error and communication breakdowns.

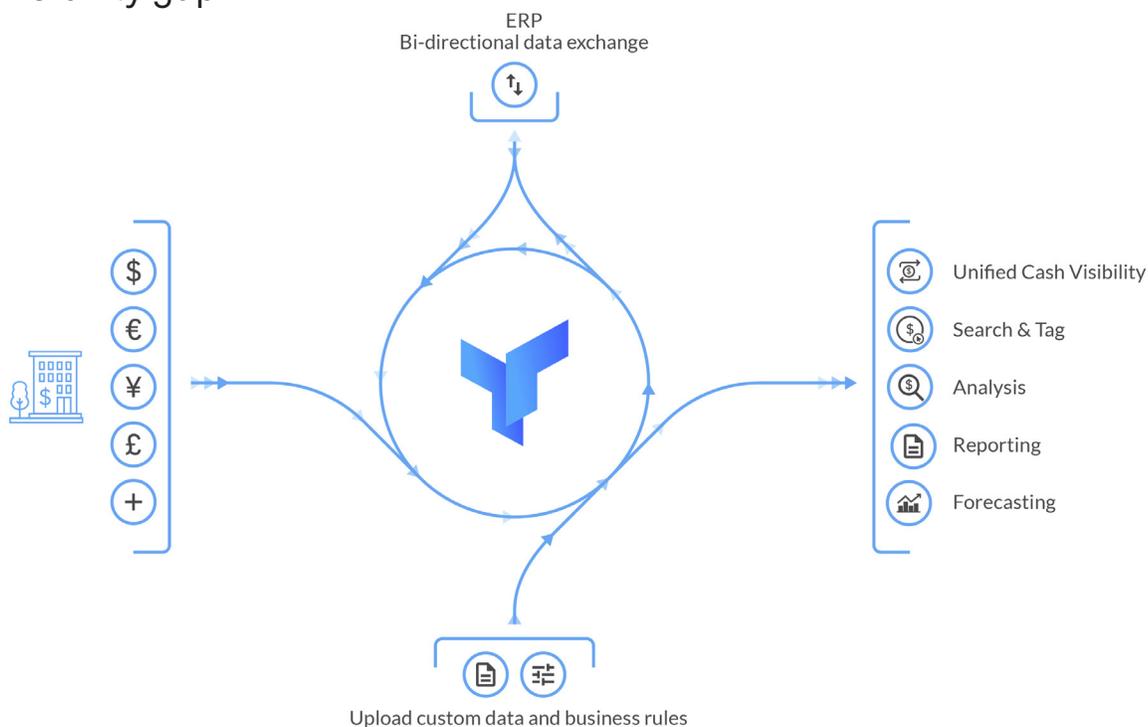
# Increase the Efficiency of Your Startup's Cash Management Through Automation

The most valuable thing you can do to set up your startup for success is to craft a direct cash forecast. By using it in conjunction with an indirect forecast, you can gain a more accurate view of short-term cash, and better forecast your cash requirements in the future.

Utilizing new technologies like open banking APIs and machine learning, you can automate the aggregation of your raw bank data and perform predictive analysis. Machine learning analysis based on historical cash performance is quite accurate. With a system like Trovata, our automated cash management platform, you can instantly know how much cash you have, forecast quickly, and manage cash flow with precision.

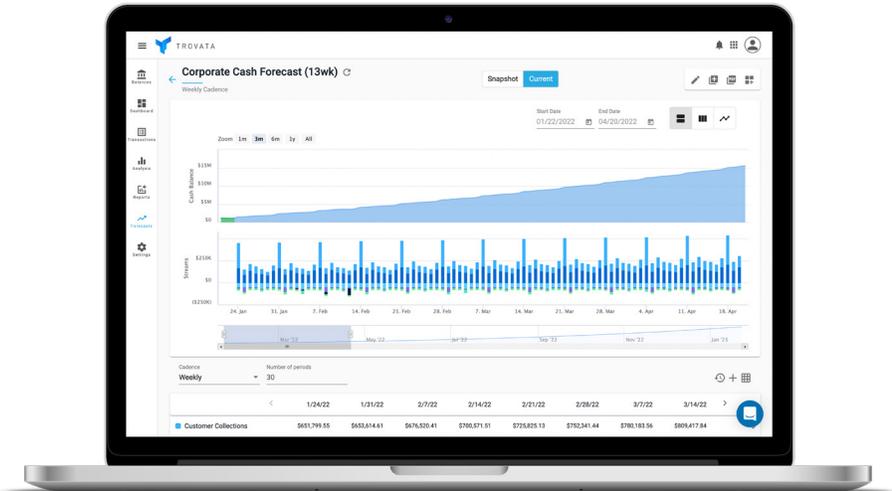
## Gain Visibility Into Your Cash Flows with Trovata's Library of Open Banking APIs

As your startup and bank data expand, the volume of cash data increases exponentially, making it more difficult to manage your cash flow. While many legacy technologies promise to automate the aggregation of bank data (we're looking at you, Kyriba), manual intervention is often required, leaving your treasury with a cash visibility gap.



Trovata, the next-gen, automated cash management platform provides unified access to the richest banking information available from all your bank providers, empowering you to make better and quicker data-driven decisions. By aggregating your cash and transaction data with open banking APIs, and collecting that data into a Mult-Bank Data Lake™, you can eliminate manual data entry and automate your cash reporting and forecasting.

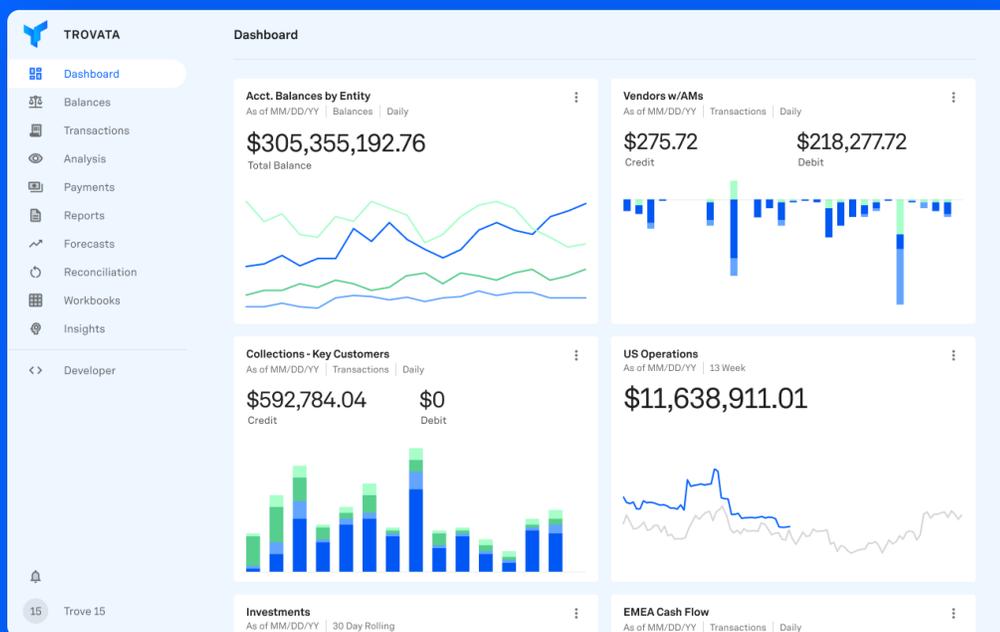
# Break Free From Spreadsheets with Automated Reporting and Forecasting



Trovata makes it easier than ever to automate your cash forecast with our comprehensive suite of automated cash reporting and forecasting functionality powered by artificial intelligence and machine learning technology. Through analyzing your organization's historical data stored within the Multi-Bank Data Lake™, Trovata generates detailed forecasts that take into account your historical data trends, increasing forecast accuracy.

Your organization also has the ability to customize and create new forecasts through scenario modeling and planning capabilities. Trovata provides the flexibility to model and create cash forecasts around different business decisions and potential investments with enhanced, user-defined growth rates and variables. By performing your scenario planning through tailoring your cash forecast, you can prepare for any disaster scenarios and growth opportunities that may arrive at your organization's door.

# Join Forward-Thinking Startups Who Use Trovata for Cash Management



With Trovata's free plan, you can connect your first bank securely at no cost. We're able to offer this connectivity from our own library of corporate banking APIs which we pioneered with global banks who have invested in Trovata; JP Morgan, Wells Fargo, Capital One, and NAB. Because Trovata uses AI and ML, it enables startups like Square, CrowdStrike, and Samsara to build powerful reports and forecasts and gain 100% visibility into their cash.



“ Straightforward implementation, quick onboarding and easy to use. Trovata is extremely intuitive and easy to understand. Building cash reports and cashflows has never been less manual. ”

– Niall Burke, Global Treasury Manager, Eventbrite

As proven time and again, in an economic downturn, whether you're a startup or a Fortune 500, cash is still king. Explore for yourself to discover how managing cash is better with Trovata. Request a demo today.

[Get Demo](#)



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